

**Translation**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

|   |   |   |                       |   |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
|---|---|---|-----------------------|---|---------------------|-------------------------------------|----------|--------------------------------------|--|-------------------------------------|----------------------------|---|---|-------------------------------------|-------------------------|--------------------------------------|--|---------------------------------------|---|
| Applicant's or agent's file reference<br><b>SK04PCT00053</b>  |   | <b>FOR FURTHER ACTION</b>                           | See Form PCT/IPEA/416 |   |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| International application No.<br><b>PCT/JP2004/009021</b>   | International filing date (day/month/year)<br><b>25.06.2004</b>   | Priority date (day/month/year)<br><b>30.06.2003</b> |                       |   |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| International Patent Classification (IPC) or national classification and IPC  |   |   |                       |   |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| Applicant<br><b>SONY CORPORATION</b>  |   |   |                       |   |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| <p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (sent to the applicant and to the International Bureau) a total of <u>4</u> sheets, as follows:</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> <p>4. This report contains indications relating to the following items:</p> <table border="0" style="width: 100%;"> <tr> <td><input checked="" type="checkbox"/> Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td><input type="checkbox"/> Box No. II</td> <td>Priority</td> </tr> <tr> <td><input type="checkbox"/> Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/> Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/> Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/> Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input type="checkbox"/> Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input type="checkbox"/> Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table> |   |   |                       | <input checked="" type="checkbox"/> Box No. I | Basis of the report | <input type="checkbox"/> Box No. II | Priority | <input type="checkbox"/> Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability | <input type="checkbox"/> Box No. IV | Lack of unity of invention | <input checked="" type="checkbox"/> Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement | <input type="checkbox"/> Box No. VI | Certain documents cited | <input type="checkbox"/> Box No. VII | Certain defects in the international application | <input type="checkbox"/> Box No. VIII | Certain observations on the international application |
| <input checked="" type="checkbox"/> Box No. I   | Basis of the report   |   |                       |   |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| <input type="checkbox"/> Box No. II   | Priority  |   |                       |   |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| <input type="checkbox"/> Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |   |                       |   |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| <input type="checkbox"/> Box No. IV   | Lack of unity of invention  |   |                       |   |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| <input checked="" type="checkbox"/> Box No. V   | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |   |                       |   |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| <input type="checkbox"/> Box No. VI   | Certain documents cited   |   |                       |   |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| <input type="checkbox"/> Box No. VII  | Certain defects in the international application  |   |                       |   |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| <input type="checkbox"/> Box No. VIII   | Certain observations on the international application   |   |                       |   |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| Date of submission of the demand  |   | Date of completion of this report                   |                       |   |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| Name and mailing address of the IPEA/JP   |   | Authorized officer                                  |                       |   |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| Facsimile No.   |   | Telephone No.                                       |                       |   |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |

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## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/009021

| Box No. I | Basis of the report  |
|-----------|--|
| 1.        | <p>With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.</p> <p><input type="checkbox"/> This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:</p> <p><input type="checkbox"/> international search (Rule 12.3 and 23.1(b))</p> <p><input type="checkbox"/> publication of the international application (Rule 12.4)</p> <p><input type="checkbox"/> international preliminary examination (Rule 55.2 and/or 55.3)</p>  |
| 2.        | <p>With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):</p> <p><input type="checkbox"/> the international application as originally filed/furnished</p> <p><input checked="" type="checkbox"/> the description:</p> <p>pages <u>1, 3-6</u> as originally filed/furnished</p> <p>pages* <u>2/1</u> received by this Authority on <u>28.04.2005</u></p> <p>pages* <u>2</u> received by this Authority on <u>16.09.2005</u></p> <p><input checked="" type="checkbox"/> the claims:</p> <p>nos. <u>2-5, 7</u> as originally filed/furnished</p> <p>nos.* <u>9, 10, 11, 12</u> as amended (together with any statement) under Article 19</p> <p>nos.* <u>1</u> received by this Authority on <u>16.09.2005</u></p> <p>nos.* _____ received by this Authority on _____</p> <p><input checked="" type="checkbox"/> the drawings:</p> <p>sheets <u>fig. 1-7</u> as originally filed/furnished</p> <p>sheets* _____ received by this Authority on _____</p> <p>sheets* _____ received by this Authority on _____</p> <p><input type="checkbox"/> a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.</p> |
| 3.        | <p><input checked="" type="checkbox"/> The amendments have resulted in the cancellation of:</p> <p><input type="checkbox"/> the description, pages _____</p> <p><input checked="" type="checkbox"/> the claims, nos. <u>6, 8</u></p> <p><input type="checkbox"/> the drawings, sheets/figs _____</p> <p><input type="checkbox"/> the sequence listing (specify): _____</p> <p><input type="checkbox"/> any table(s) related to sequence listing (specify): _____</p>   |
| 4.        | <p><input type="checkbox"/> This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).</p> <p><input type="checkbox"/> the description, pages _____</p> <p><input type="checkbox"/> the claims, nos. _____</p> <p><input type="checkbox"/> the drawings, sheets/figs _____</p> <p><input type="checkbox"/> the sequence listing (specify): _____</p> <p><input type="checkbox"/> any table(s) related to sequence listing (specify): _____</p>  |

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/009021

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

|                               |        |                     |     |
|-------------------------------|--------|---------------------|-----|
| Novelty (N)                   | Claims | <u>1-5, 7, 9-12</u> | YES |
|                               | Claims | _____               | NO  |
| Inventive step (IS)           | Claims | <u>1-5, 7, 9-12</u> | YES |
|                               | Claims | _____               | NO  |
| Industrial applicability (IA) | Claims | <u>1-5, 7, 9-12</u> | YES |
|                               | Claims | _____               | NO  |

## 2. Citations and explanations (Rule 70.7)

Document 1: JP 2002-084345 A (Miyota Kabushiki Kaisha),  
22 March 2002

Document 2: JP 08-268536 A (Sanki Kogyo Kabushiki  
Kaisha), 15 October 1996

Document 3: JP 2002-314321 A (Samsung Electro-Mechanics  
Co., Ltd.), 25 October 2002

Document 4: JP 2000-242755 A (Dainippon Printing Co.,  
Ltd.), 08 September 2000

Document 5: JP 2003-150916 A (Sony Corp.), 23 May 2003

Document 6: 2000-278170 A (Kokusai Electric Co., Ltd.),  
06 October 2000

Document 7: JP 2003-060748 A (Sony Corp.), 28 February  
2003

The invention set forth in claims 1 to 5, 7 and 9  
to 12 is novel and involves an inventive step.

Document 1 discloses a portable telephone with a  
non-contact IC card function, wherein the antenna for the  
non-contact IC card is configured by disposing a  
conductive antenna, which is formed from a conductive  
line that has been wound into a coiled shape, around the  
periphery of the structural object that functions as a

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

portable telephone (paragraph 5 and fig. 3).

Document 2 discloses a feature of using a loop coil antenna with a conductive line that is disposed in a spiralling shape so as to surround the entire perimeter of the side surfaces of the carrying case (the case member) as the antenna for carrying out non-contact communication (paragraphs 3 to 6 and 12, and fig. 1, 3 and 4).

Document 3 discloses the feature of producing an antenna coil from a flexible substrate (a bendable insulating substrate) with a conductive pattern printed thereupon (paragraphs 19 and 23, and fig. 8).

Document 4 discloses the feature of embedding the loop antenna coil within the case member (paragraph 2).

Document 5 discloses the feature of configuring so that the data communication device has a non-contact IC card function (a wireless tag function) and a read/write function (paragraphs 13 and 14).

Document 6 discloses the feature of using different antennas according to the intended application (paragraphs 20 to 22 and fig. 1 and 2).

Document 7 discloses a communication device that has a non-contact IC card function, an antenna for a portable telephone, and a portable telephone function, wherein said communication is also equipped with a main body member and a display unit that is attached to the main body member in a manner such that it is possible to open and close the display unit relative to the main body member (paragraphs 15 to 21 and fig. 1 to 5).

However, the feature of arranging the loop coil antenna so that at least one portion of the conductive line surrounds the side surfaces other than the two main

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## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

surfaces among the surfaces that constitute the case member in order to resolve the technical issue of ensuring that the loop coil antenna exhibits a uniform sensitivity throughout both surfaces of the case member and the technical issue of enlarging the region with a sensitivity that is sufficient to allow communication is not disclosed in documents 1 to 7, and would not have been obvious to a person skilled in the art.

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